DB Name	<u>Query</u>	Hit Count	Set Name
USPT,JPAB,EPAB,DWPI,TDBD	Asahara-takayuki.in.	3	<u>L11</u>
USPT,JPAB,EPAB,DWPI,TDBD	Isner-jeffrey-m\$.in.	25	<u>L10</u>
USPT,JPAB,EPAB,DWPI,TDBD	Isner-jeffrey-k\$.in.	0	<u>L9</u>
USPT,JPAB,EPAB,DWPI,TDBD	L7 and (neoangiogenesis or vascularization)	3	<u>L8</u> .
USPT,JPAB,EPAB,DWPI,TDBD	(GM-CSF) and (EPC or ((endothelial progenitor) adj cell))	22	<u>L7</u>
USPT,JPAB,EPAB,DWPI,TDBD	L5 and (GM-CSF or G-CSF or M-CSF)	8	<u>L6</u>
USPT,JPAB,EPAB,DWPI,TDBD	(therapeutic angiogenesis)	26	<u>L5</u>
USPT,JPAB,EPAB,DWPI,TDBD	L2 and (EPC? or angioblast)	2	<u>L4</u>
USPT,JPAB,EPAB,DWPI,TDBD	L2 and ((EPC) or (endothelial progenitor?))	1	<u>L3</u>
USPT,JPAB,EPAB,DWPI,TDBD	L1 and (GM-CSF or G-CSF or M-CSF)	66	<u>L2</u>
USPT,JPAB,EPAB,DWPI,TDBD	(therapeutic angiogenesis) or (neovascularization)	1558	<u>L1</u>



Set Name Query side by side			Hit Count Set Name result set	
DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=AND				
<u>L6</u>	L5 and (ischemia)	8	<u>L6</u>	
<u>L5</u>	L4 and ((GM-CSF) or (M-CSF) or (b-FGF) or SCF or (SDF-1) or (G-CSF) or HGF or angiopoietin or (FLT-3))	44	<u>L5</u>	
<u>L4</u>	((endothelial adj progenitor) adj cell) or (EPC)	2622	<u>L4</u>	
<u>L3</u>	Asahara-takayuki.in.	4	<u>L3</u>	
<u>L2</u>	L1 and (GM-CSF)	4	<u>L2</u>	
<u>L1</u>	Isner-jeffrey-M\$.in.	23	<u>L1</u>	

END OF SEARCH HISTORY

```
constitutive overexpressit of VEGF sufficient to induce * rapeutic*
*angiogenesis* in selected patients with critical *limb* *ischemia*.
MEDICAL DESCRIPTORS:
**limb* *ischemia*--therapy--th; *gene therapy; *angiogenesis; *peripheral
occlusive artery disease--therapy--th
collateral circulation; gene transfer; treatment outcome; symptomatology;
gene expression; *limb* perfusion; angiography; *limb* salvage; edema
--complication--co; blood vessel permeability; protein expression; protein
analysis; human; male; female; clinical article; clinical trial; aged;
adult; article; priority journal
?ds
                Description
        Items
                (THERAPEUTIC (W) ANGIOGENESIS) OR (NEOVASCULARIZATION)
Set
        25951
S1
                S1 AND (GM-CSF OR M-CSF OR G-CSF)
s2
            0
                S1 AND (SCF OR SDF-1 OR ANGIOPOIETIN-? OR FLT-3)
           86
S3
                S3 AND (IN (W) VIVO)
           10
S4
                RD (unique items)
            9
S5
                S1 AND ((IN (W) VIVO) AND B-FGF)
            0
S6
                (THERAPEUTIC (W) ANGIOGENESIS) AND (B-FGF)
            0
s7
                 (GM-CSF) AND ((EPC) OR (ENDOTHELIAL (W) PROGENITOR?))
            0
 S8
                 (CSF) AND (EPC)
           13
 S9
                RD (unique items)
            8
 S10
                 (ANGIOGENIC (W) (PEPTIDE OR POLYPEPTIDE)) AND (EPC)
            0
                 (THERAPEUTIC (W) ANGIOGENESIS) AND (ENDOTHELIAL (W) PROGEN-
 S11
            8
 S12
             ITOR (W) CELL?)
                RD (unique items)
            6
 S13
                 (THERAPEUTIC (W) ANGIOGENESIS)
          434
 S14
                S14 AND (ISCHEMIA)
           267
 S15
                S15 AND (BRAIN)
            2
 S16
                RD (unique items)
            2
 S17
                 S15 AND (CNS)
            0
 S18
                 S15 AND (LIMB OR HEART)
           187
 S19
                 RD (unique items)
           116
 S20
                 S20 NOT PY>1999
            60
 S21
                 S21 AND (CO-ADMINISTRATION OR CO-DELIVERY)
             0
 S22
                 S21 AND (ENDOTHELIAL (W) CELL (W) MITOGEN)
             2
 ?s s21 and (CSF)
               60 S21
           117103 CSF
                0 S21 AND (CSF)
 PLEASE ENTER A COMMAND OR BE LOGGED OFF IN 5 MINUTES
 ?s (hematopoietic (w) factor) and (EPC)
            95857 HEMATOPOIÈTIC
          1615552 FACTOR
              120 HEMATOPOIETIC (W) FACTOR
             1898 EPC
                0 (HEMATOPOIETIC (W) FACTOR) AND (EPC)
 ?s (hematopoietic (w) factor) and (endothelial (w) progenitor (w) cell)
            95857 HEMATOPOIETIC
          1615552 FACTOR
              120 HEMATOPOIETIC (W) FACTOR
            232351 ENDOTHELIAL
             50136 PROGENITOR
           5352207 CELL
                24 ENDOTHELIAL (W) PROGENITOR (W) CELL
                   (HEMATOPOIETIC (W) FACTOR) AND (ENDOTHELIAL (W)
       S26
                    PROGENITOR (W) CELL)
  ?ds
                 Description
          Items
  Set
                 (THERAPEUTIC (W) ANGIOGENESIS) OR (NEOVASCULARIZATION)
          25951
  S1
                  S1 AND (GM-CSF OR M-CSF OR G-CSF)
             0
  S2
                  S1 AND (SCF OR SDF-1 OR ANGIOPOIETIN-? OR FLT-3)
             86
  s3
                  S3 AND (IN (W) VIVO)
```

10

S4

```
RD (uniqu
                        items)
           9
S5
           0 S1 AND ((IN (W) VIVO) AND B-FGF)
S6
              (THERAPEUTIC (W) ANGIOGENESIS) AND (B-FGF)
          0
s7
              (GM-CSF) AND ((EPC) OR (ENDOTHELIAL (W) PROGENITOR?))
          0
S8
              (CSF) AND (EPC)
          13
S9
          8 RD (unique items)
S10
               (ANGIOGENIC (W) (PEPTIDE OR POLYPEPTIDE)) AND (EPC)
S11
               (THERAPEUTIC (W) ANGIOGENESIS) AND (ENDOTHELIAL (W) PROGEN-
S12
           ITOR (W) CELL?)
           6 RD (unique items)
S13
         434 (THERAPEUTIC (W) ANGIOGENESIS)
S14
         267 S14 AND (ISCHEMIA)
S15
         2 S15 AND (BRAIN)
S16
          2 RD (unique items)
S17
          0
              S15 AND (CNS)
S18
               S15 AND (LIMB OR HEART)
S19
         187
         116 RD (unique items)
S20
          60 S20 NOT PY>1999
S21
               S21 AND (CO-ADMINISTRATION OR CO-DELIVERY)
           0
S22
               S21 AND (ENDOTHELIAL (W) CELL (W) MITOGEN)
S23
              S21 AND (CSF)
S24
               (HEMATOPOIETIC (W) FACTOR) AND (EPC)
S25
           0
               (HEMATOPOIETIC (W) FACTOR) AND (ENDOTHELIAL (W) PROGENITOR
S26
            (W) CELL)
?logoff
       20apr01 07:59:56 User259876 Session D208.2
          $10.66 3.332 DialUnits File155
              $3.20 16 Type(s) in Format 3
           $3.20 16 Types
    $13.86 Estimated cost File155
           $16.89 3.017 DialUnits File5
              $11.55 7 Type(s) in Format 3
           $11.55 7 Types
           Estimated cost File5
           $29.80 3.506 DialUnits File73
              $9.40 4 Type(s) in Format 3
            $9.40 4 Types
    $39.20 Estimated cost File73
            OneSearch, 3 files, 9.854 DialUnits FileOS
     $2.45 TYMNET
    $83.95 Estimated cost this search
    $84.39 Estimated total session cost 9.977 DialUnits
```

Status: Signed Off. (49 minutes)

Status: Path 1 of [Dialog Information Services via Modem] ### Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog) Trying 3106900061...Open DIALOG INFORMATION SERVICES PLEASE LOGON: ****** HHHHHHHH SSSSSSS? ### Status: Signing onto Dialog ***** ENTER PASSWORD: ****** HHHHHHHH SSSSSSS? ****** Welcome to DIALOG ### Status: Connected Dialog level 00.12.12D Last logoff: 16apr01 09:05:17 Logon file001 20apr01 07:11:27 *** ANNOUNCEMENT *** NEW FILE RELEASED ***IBISWorld Market Research (File 753) ***Investext PDF Index (File 745) ***Daily and Sunday Telegraph (London) Papers (File 756) ***The Mirror Group Publications (United Kingdom) (File 757) ***Reuters Business Insight (File 759) UPDATING RESUMED ***Extel Financial Cards from Primark (File 500) ***Books In Print (File 470) ***Extel News Cards from Primark (File 501) RELOADED ***Kompass Asia/Pacific (File 592) ***Kompass Central/Eastern Europe (File 593) ***Kompass Canada (File 594) FILES REMOVED ***EconBase (File 565) New pricing structure for Pharmaprojects (Files 128/928) from April 1, 2001. Check Help News128 or Help News928 for further information. >>>Get immediate news with Dialog's First Release news service. First Release updates major newswire databases within 15 minutes of transmission over the wire. First Release provides full Dialog searchability and full-text features. To search First Release files in OneSearch simply BEGIN FIRST for coverage from Dialog's broad spectrum of news wires. >>> Enter BEGIN HOMEBASE for Dialog Announcements <<< of new databases, price changes, etc. KWIC is set to 50. HILIGHT set on as '*' 1:ERIC 1966-2001/Apr 17 File (c) format only 2001 The Dialog Corporation Set Items Description

· ==

... 1994

___ ____

```
?b 155, 5, 73
      20apr01 07:11:44 User259876 Session D208.1
                  0.123 DialUnits File1
           $0.43
    $0.43 Estimated cost File1
    $0.01 TYMNET
    $0.44 Estimated cost this search
    $0.44 Estimated total session cost 0.123 DialUnits
SYSTEM:OS - DIALOG OneSearch
  File 155:MEDLINE(R) 1966-2001/Apr W3
         (c) format only 2000 Dialog Corporation
*File 155: Medline has now updated. For further information
see Help News155.
        5:Biosis Previews(R) 1969-2001/Apr W2
  File
         (c) 2001 BIOSIS
  File 73:EMBASE 1974-2001/Apr W3
         (c) 2001 Elsevier Science B.V.
*File 73: For information about Explode feature please
see Help News73.
      Set Items Description
      ___ ____
?s (therapeutic (w) angiogenesis) or (neovascularization)
        1605538 THERAPEUTIC
          34478 ANGIOGENESIS
            434 THERAPEUTIC (W) ANGIOGENESIS
          25667 NEOVASCULARIZATION
          25951 (THERAPEUTIC (W) ANGIOGENESIS) OR (NEOVASCULARIZATION)
?s s1 and (GM-CSF or M-CSF or G-CSF)
          25951 S1
            746 GM-CSF
             72 M-CSF
            339 G-CSF
              0 S1 AND (GM-CSF OR M-CSF OR G-CSF)
      S2
?s s1 and (SCF or SDF-1 or angiopoietin-? or Flt-3)
          25951 S1
           6387 SCF
             69 SDF-1
            250 ANGIOPOIETIN-?

34 FLT-3

86 S1 AND (SCF OR SDF-1 OR ANGIOPOIETIN-? OR FLT-3)
      S3
?s s3 and (in (w) vivo)
Processing
Processing
Processing
Processing
             86 S3
        22997232 IN
          850380 VIVO
          828373 IN(W) VIVO
             10 S3 AND (IN (W) VIVO)
...completed examining records
              9 RD (unique items)
      S5
?t s5/3, k/all
          (Item 1 from file: 155)
 5/3,K/1
DIALOG(R) File 155: MEDLINE(R)
(c) format only 2000 Dialog Corporation. All rts. reserv.
10753641
          21101222
 Differential inhibition of tumor angiogenesis by tie2 and vascular
endothelial growth factor receptor-2 dominant-negative receptor mutants.
  Stratmann A; Acker T; Burger AM; Amann K; Risau W; Plate KH
  Department of Neuropathology, Freiburg University Medical School,
```

Freiburg, Germany.

International journal of cancer. Journal international du cancer (United States) Feb 1 2001, 91 (3) p273-82, ISSN 0020-7136 Journal Code: GQU

Languages: ENGLISH

Document type: Journal Article

... vascular endothelial growth factor (VEGF), a major regulator of embryonic and hypoxia-mediated angiogenesis, is necessary for tumor angiogenesis. VEGF is expressed in tumor cells *in* *vivo*, and its tyrosine kinase receptors VEGFR-1 and VEGFR-2 are up-regulated in the tumor endothelium. A second endothelial cell-specific ligand/receptor tyrosine...

... whereas M6378 tumors expressed VEGF, VEGFR-2, tie2 and angiopoietin-1 but little angiopoietin-2, suggesting activation of both VEGFR-2 and tie2 signaling pathways. *In* *vivo* studies using truncated dominant-negative tie2 and VEGFR-2 mutants revealed inhibition of M6363 tumor growth by 15% (truncated tie2) and 36% (truncated VEGFR-2...

Descriptors: Adenocarcinoma, Mucinous--blood supply--BS; *Breast Neoplasms--blood supply--BS; *Carcinoma, Infiltrating Duct--blood supply--BS; *Membrane Glycoproteins--metabolism--ME; *Neoplasm Proteins--metabolism--ME; *Neovascularization*, Pathologic--metabolism--ME; *Proteins--metabolism--ME; *Proto-Oncogene Proteins--metabolism--ME; *Receptor Protein-Tyrosine Kinases--metabolism--ME; *Receptors, Growth Factor--metabolism--ME

Chemical Name: Membrane Glycoproteins; Neoplasm Proteins; Proteins; Proto-Oncogene Proteins; RNA, Messenger; Receptors, Growth Factor; angiopoietin 2; *angiopoietin-1*; vascular endothelial cell growth factor receptor; proto-oncogene protein flt; TIE-2 receptor tyrosine kinase; Receptor Protein-Tyrosine Kinases

5/3,K/2 (Item 2 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

10730431 20580777

Angiotensin AT(1) and AT(2) receptors differentially regulate angiopoietin-2 and vascular endothelial growth factor expression and angiogenesis by modulating heparin binding-epidermal growth factor (EGF)-mediated EGF receptor transactivation.

Fujiyama S; Matsubara H; Nozawa Y; Maruyama K; Mori Y; Tsutsumi Y; Masaki H; Uchiyama Y; Koyama Y; Nose A; Iba O; Tateishi E; Ogata N; Jyo N; Higashiyama S; Iwasaka T

Department of Medicine II, Kansai Medical University, Osaka, Japan. Circulation research (UNITED STATES) Jan 19 2001, 88 (1) p22-9, ISSN 1524-4571 Journal Code: DCX

Languages: ENGLISH

Document type: Journal Article

... growth factor (VEGF) expression in an HB-EGF/EGFR-dependent manner. AT(2) inhibited AT(1)-mediated Ang2 expression and phosphorylation of EGFR. In an *in* *vivo* corneal assay, AT(1) induced angiogenesis in an HB-EGF-dependent manner and enhanced the angiogenic activity of VEGF. Although neither Ang2 nor Ang1 alone...

Descriptors: Endothelial Growth Factors-genetics--GE; *Epidermal Growth Factor--physiology--PH; *Lymphokines--genetics--GE; **Neovascularization*, Physiologic--physiology--PH; *Proteins--genetics--GE; *Receptor, Epidermal Growth Factor--genetics--GE; *Receptors, Angiotensin--physiology--PH...; drug effects--DE; Gene Expression Regulation--drug effects--DE; Imidazoles --pharmacology--PD; Indoles--pharmacology--PD; Maleimides--pharmacology--PD; Membrane Glycoproteins--genetics--GE; Naphthalenes--pharmacology--PD; *Neovascularization*, Physiologic--drug effects--DE; Protein Kinase C--antagonists and inhibitors--AI; Protein Kinase C--metabolism--ME; Protein-Tyrosine-Phosphatase--metabolism--ME; Pyridines--pharmacology--PD; RNA...

Chemical Name: CS & Endothelial Growth Factors; Lazoles; Indoles; Lymphokines; Maleimides; Membrane Glycoproteins; Naphthalenes; Proteins; Pyridin es; RNA, Messenger; Receptors, Angiotensin; Receptors, Cell Surface; Tetrazoles; Tyrphostins; angiopoietin 2; *angiopoietin-1*; angiotensin II type 1 receptor; angiotensin II type 2 receptor; vascular permeability factor; Angiotensin II; calphostin C; PD 123319; GF 109203X; heparin-binding EGF...

5/3,K/3 (Item 3 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

10697573 21012455

Early effects of hypoxia/reoxygenation on VEGF, ang-1, ang-2 and their receptors in the rat myocardium: implications for myocardial angiogenesis.

Ray PS; Estrada-Hernandez T; Sasaki H; Zhu L; Maulik N

Department of Surgery, University of Connecticut Health Center, Farmington, USA.

Molecular and cellular biochemistry (Netherlands) Oct 2000, 213 (1-2) p145-53, ISSN 0300-8177 Journal Code: NGU

Contract/Grant No.: HL 22559, HL, NHLBI; HL 33889, HL, NHLBI; HL 56803, HL, NHLBI; +

Languages: ENGLISH

Document type: Journal Article

- ... Tie systems in adult rat myocardium. Western blot as well as immunohistochemical analyses were performed on hearts obtained from rats exposed to various durations of *in* *vivo* systemic hypoxemic hypoxia followed by 24 h reoxygenation. The relative time course of protein expression in response to increasing durations of hypoxia, as indicated from...
- ; Blotting, Western; Immunohistochemistry; *Neovascularization*, Physiologic; Rats; Rats, Sprague-Dawley

Chemical Name: Endothelial Growth Factors; Lymphokines; Membrane Glycoproteins; Proteins; Receptors, Cell Surface; angiopoietin 2; *angiopoietin-1*; vascular permeability factor; TIE-2 receptor tyrosine kinase; tie receptor tyrosine kinase; Receptor Protein-Tyrosine Kinases

5/3,K/4 (Item 4 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

10523859 20397756

A role for hematopoietic stem cells in promoting angiogenesis.

Takakura N; Watanabe T; Suenobu S; Yamada Y; Noda T; Ito Y; Satake M; Suda T

Department of Cell Differentiation, Institute of Molecular Embryology and Genetics, Kumamoto University School of Medicine, Japan. ntakaku@gpo.kumamoto-u.ac.jp

Cell (UNITED STATES) Jul 21 2000, 102 (2) p199-209, ISSN 0092-8674

Journal Code: CQ4
Languages: ENGLISH

Document type: JOURNAL ARTICLE

... Sp cultures from AML1 null embryos was rescued by addition of HSCs or angiopoietin-1 (Ang1). HSCs, which express Ang1, directly promoted migration of ECs *in* *vivo* and in vitro. These results indicate that HSCs are critical for angiogenesis.

Descriptors: Hematopoietic Stem Cells--Physiology--PH; *
Neovascularization, Physiologic--Physiology--PH

Chemical Name: Receptor Protein-Tyrosine Kinases; (*angiopoietin-1*; (menin; (vascular endothelial cell growth factor receptor; (Antigens, CD31; (AML1 protein; (DNA-Binding Proteins; (Membrane Glycoproteins; (Neoplasm Proteins; (Receptors, Growth Factor; (Transcription Factors

5/3,K/5 (Item 5 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

10110943 98373889

Tie2 receptor ligands, angiopoietin-1 and angiopoietin-2, modulate VEGF-induced postnatal *neovascularization* [see comments]

Asahara T; Chen D; Takahashi T; Fujikawa K; Kearney M; Magner M; Yancopoulos GD; Isner JM

Department of Medicine (Cardiology), St. Elizabeth's Medical Center, Tufts University School of Medicine, Boston, Mass 02135, USA.

Circulation research (UNITED STATES) Aug 10 1998, 83 (3) p233-40, ISSN 0009-7330 Journal Code: DAJ

Comment in Circ Res 1998 Aug 10;83(3):342-3

Languages: ENGLISH

Document type: JOURNAL ARTICLE

Tie2 receptor ligands, angiopoietin-1 and angiopoietin-2, modulate VEGF-induced postnatal *neovascularization* [see comments]

... vessel formation in the developing embryo by antagonizing the effects of Angl and Tie2 and was thus considered to represent a natural Angl/Tie2 inhibitor. *In* *vivo* effects of either angiopoietin on postnatal *neovascularization* , however, have not been previously described. Accordingly, we used the cornea micropocket assay of *neovascularization* to investigate the impact of angiopoietins on *neovascularization* *in* *vivo*. Neither Angl nor Ang2 alone promoted *neovascularization*. Pellets containing vascular endothelial growth factor (VEGF) alone induced corneal neovascularity extending from the limbus across the cornea. Addition of Ang 1 to VEGF (Angl...

...more circumferential (160+/-15degrees) neovascularity than VEGF alone or Ang1+VEGF (P<0.05). Excess soluble Tie2 receptor (sTie2-Fc) precluded modulation of VEGF-induced *neovascularization* by both Ang2 and Ang1. Fluorescent microscopic findings demonstrated enhanced capillary density (fluorescence intensity, 2.55+/-0.23 e+9 versus 1.23+/-0.17...

... postnatal bioactivity associated with either angiopoietin. In particular, these results indicate that angiopoietins may potentiate the effects of other angiogenic cytokines. Moreover, these findings provide *in* *vivo* evidence that Angl promotes vascular network maturation, whereas Ang2 works to initiate *neovascularization*.

Descriptors: Endothelial Growth Factors--Metabolism--ME; *Lymphokines --Metabolism--ME; *Membrane Glycoproteins--Metabolism--ME; **Neovasculariza tion*, Physiologic; *Proteins--Metabolism--ME; *Receptor Protein-Tyrosine Kinases--Metabolism--ME

Chemical Name: TIE-2 receptor tyrosine kinase; (Receptor Protein-Tyrosine Kinases; (angiopoietin 2; (*angiopoietin-1*; (vascular permeability factor; (Endothelial Growth Factors; (Enzyme Inhibitors; (Lymphokines; (Membrane Glycoproteins; (Proteins

5/3,K/6 (Item 6 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

10082440 97349327

Angiopoietin-2, a natural antagonist for Tie2 that disrupts *in* *vivo* angiogenesis [see comments]

Maisonpierre PC; Suri C; Jones PF; Bartunkova S; Wiegand SJ; Radziejewski C; Compton D; McClain J; Aldrich TH; Papadopoulos N; Daly TJ; Davis S; Sato TN; Yancopoulos GD

Regeneron Pharmaceuticals Inc., 777 Old Saw Mill River Road, Tarrytown, NY 10591, USA.

Science (UNITED STATES) Jul 4 1997, 277 (5322) p55-60, ISSN 0036-8075 Journal Code: UJ7

Comment in Science 19 Jul 4;277(5322):48-50

Languages: ENGLISH

Document type: JOURNAL ARTICLE

Angiopoietin-2, a natural antagonist for Tie2 that disrupts *in* *vivo* angiogenesis [see comments]

Descriptors: Blood Vessels--Metabolism--ME; *Endothelium, Vascular --Cytology--CY; **Neovascularization*, Physiologic; *Proteins--Metabolism --ME; *Receptor Protein-Tyrosine Kinases--Antagonists and Inhibitors--AI Chemical Name: TIE-2 receptor tyrosine kinase; (Receptor Protein-Tyrosine Kinases; (angiopoietin 2; (*angiopoietin-1*; (vascular permeability factor; (Endothelial Growth Factors; (Ligands; (Lymphokines; (Membrane Glycoproteins; (Proteins; (Recombinant Fusion Proteins

5/3,K/7 (Item 7 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

08914063 97134664

Requisite role of angiopoietin-1, a ligand for the TIE2 receptor, during embryonic angiogenesis [see comments]

Suri C; Jones PF; Patan S; Bartunkova S; Maisonpierre PC; Davis S; Sato TN; Yancopoulos GD

Regeneron Pharmaceuticals, Inc., Tarrytown, New York 10591, USA.
Cell (UNITED STATES) Dec 27 1996, 87 (7) p1171-80, ISSN 0092-8674

Journal Code: CQ4

Comment in Cell 1996 Dec 27;87(7):1153-5

Languages: ENGLISH

Document type: JOURNAL ARTICLE

... reminiscent of those previously seen in mice lacking TIE2, demonstrating that Angiopoietin-1 is a primary physiologic ligand for TIE2 and that it has critical *in* *vivo* angiogenic actions that are distinct from VEGF and that are not reflected in the classic in vitro assays used to characterize VEGF. Angiopoietin-1 seems...

Descriptors: Blood Vessels--Embryology--EM; *Endothelium, Vascular --Embryology--EM; *Glycoproteins--Physiology--PH; *Membrane Glycoproteins--Physiology--PH; **Neovascularization*, Physiologic; *Protein-Tyrosine Kinase--Physiology--PH; *Proteins--Physiology--PH

Chemical Name: Protein-Tyrosine Kinase; (TIE-2 receptor tyrosine kinase; (*angiopoietin-1*; (vascular permeability factor; (Endothelial Growth Factors; (Glycoproteins; (Ligands; (Lymphokines; (Membrane Glycoproteins; (Proteins; (RNA, Messenger

5/3,K/8 (Item 1 from file: 5) DIALOG(R)File 5:Biosis Previews(R)

(c) 2001 BIOSIS. All rts. reserv.

12777161 BIOSIS NO.: 200000530784

Expression and function of angiopoietin-1 in breast cancer.

AUTHOR: Hayes A J; Huang W-Q; Yu J; Maisonpierre P C; Liu A; Kern F G;

Lippman M E; McLeskey S W; Li L-Y(a)

AUTHOR ADDRESS: (a) Department of Oncology, Georgetown University Medical Center, 3970 Reservoir Road, NW, RB/E301, Washington, DC, 20007**USA JOURNAL: British Journal of Cancer 83 (9):p1154-1160 November, 2000

MEDIUM: print ISSN: 0007-0920

DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English

SUMMARY LANGUAGE: English

...ABSTRACT: as an angiogenic promoter in embryonic angiogenesis by promoting vascular branching, pericyte recruitment and endothelial

```
gated the role of Angl in tumo
  survival. We have invel
  *neovascularization* under clinical conditions and in animal models. The
  expression of Angl in clinical breast cancer specimens was analysed by
  using laser-capture microdissection and reverse...
... REGISTRY NUMBERS: *ANGIOPOIETIN-1*
DESCRIPTORS:
  ...ORGANISMS: human breast cancer cell line, *in*-*vivo* xenograft study
  CHEMICALS & BIOCHEMICALS:
                              *angiopoietin-1*...
 5/3,K/9
            (Item 2 from file: 5)
DIALOG(R)File
               5:Biosis Previews(R)
(c) 2001 BIOSIS. All rts. reserv.
           BIOSIS NO.: 200000530702
Expression of angiopoietin-1 and -2 and their receptor tie-2 in renal cell
AUTHOR: Theis H(a); Groene H-J(a); Rabelink T J
AUTHOR ADDRESS: (a) Deutsches Krebsforschungszentrum, Heidelberg**Germany
JOURNAL: Kidney & Blood Pressure Research 22 (4-6):p206 1999
MEDIUM: print
CONFERENCE/MEETING: Joint Scientific Meeting of the Society for Nephrology
and the German Working Group for Clinical Nephrology Freiburg, Germany
September 18-21, 1999
ISSN: 1420-4096
RECORD TYPE: Citation
LANGUAGE: English
SUMMARY LANGUAGE: English
... REGISTRY NUMBERS: *ANGIOPOIETIN-1*...
...*ANGIOPOIETIN-2*
DESCRIPTORS:
  ...ORGANISMS: PARTS ETC: circulatory system, *in* *vivo* examination...
  CHEMICALS & BIOCHEMICALS: ...*angiopoietin-1*...
... *angiopoietin-2*
 MISCELLANEOUS TERMS:
                       ... *neovascularization*;
?ds
Set
        Items
                Description
        25951
S1
               (THERAPEUTIC (W) ANGIOGENESIS) OR (NEOVASCULARIZATION)
S2
           0
                S1 AND (GM-CSF OR M-CSF OR G-CSF)
S3
           86
                S1 AND (SCF OR SDF-1 OR ANGIOPOIETIN-? OR FLT-3)
S4
           10
                S3 AND (IN (W) VIVO)
               RD (unique items)
S5
           9
?s s1 and ((in (w) vivo) and b-FGF)
Processing
Processing
Processing
           25951 S1
        22997232
                 IN
          850380
                 VIVO
          828373
                 IN(W)VIVO
               6
                 B-FGF
               0 S1 AND ((IN (W) VIVO) AND B-FGF)
?s (therapeutic (w) angiogenesis) and (b-FGF)
         1605538 THERAPEUTIC
          34478 ANGIOGENESIS
             434 THERAPEUTIC (W) ANGIOGENESIS
               6 B-FGF
               O (THERAPEUTIC (W) ANGIOGENESIS) AND (B-FGF)
?s (GM-CSF) and ((EPC) or (endothelial (w) progenitor?))
            746 GM-CSF
           1898 EPC
```

232351 ENDOTH 67508 PROGENITOR? 136 ENDOTHELIAL (W) PROGENITOR? S8 (GM-CSF) AND ((EPC) OR (ENDOTHELIAL (W) PROGENITOR?)) ?s (CSF) and (EPC) 117103 CSF 1898 EPC S9 13 (CSF) AND (EPC) ?rd ...completed examining records S10 8 RD (unique items) ?t s10/3, k/all

10/3,K/1 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

10659680 20526948

[Angiogenesis and vasculogenesis. Therapeutic strategies for stimulation of postnatal neovascularization]

Angiogenese und Vaskulogenese. Therapeutische Strategien zur Stimulation der postnatalen Neovaskularisation.

Kalka C; Asahara T; Krone W; Isner JM

Department of Medicine (Cardiovascular Research), Tufts University School of Medicine, St. Elizabeth's Medical Center, Boston, Massachusetts, USA. Ckalka@juno.com

Herz (GERMANY) Sep 2000, 25 (6) p611-22, ISSN 0340-9937

Journal Code: F88
Languages: GERMAN

Document type: Journal Article; Review; Review, Tutorial

... new blood vessels from in situ differentiating endothelial cells. Recently considered to be restricted to embryogenesis, there exists now striking evidence that endothelial progenitor cells (*EPC*) circulate also adult peripheral in blood able to participate in neovascularization. Different cytokines and growth factors have a stimulatory effect on these bone-marrow derived *EPC* . Granulocyte macrophage colony stimulating factor (GM-*CSF*) and vascular endothelial growth factor (VEGF) mobilize *EPC* from the bone marrow into the peripheral circulation. While their endogenous contribution to postnatal neovascularization needs to be documented, the iatrogenic expansion and mobilization of *EPC* might represent an effective means to augment the resident population of endothelial cells (ECs). This kind of cell therapy for tissue regeneration in ischemic cardiovascular...

10/3,K/2 (Item 2 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

09862907 99217585

Ischemia- and cytokine-induced mobilization of bone marrow-derived endothelial progenitor cells for neovascularization.

Takahashi T; Kalka C; Masuda H; Chen D; Silver M; Kearney M; Magner M; Isner JM; Asahara T

Department of Medicine (Cardiology), St. Elizabeth's Medical Center, Tufts University School of Medicine, Boston, Massachusetts 02135-2997, USA. Nature medicine (UNITED STATES) Apr 1999, 5 (4) p434-8, ISSN 1078-8956 Journal Code: CG5

Contract/Grant No.: HL 40518, HL, NHLBI; HL02824, HL, NHLBI; HL57516, HL, NHLBI

Languages: ENGLISH

Document type: JOURNAL ARTICLE

... into foci of neovascularization, consistent with postnatal vasculogenesis. We determined whether endogenous stimuli (tissue ischemia)

and exogenous cytokine erapy (granulocyte macrophageony stimulating factor, GM-*CSF*) mobilize EPCs and thereby contribute to neovascularization of ischemic tissues. The development of regional ischemia in both mice and rabbits increased the frequency of circulating EPCs. In mice, the effect of ischemia-induced *EPC* mobilization was demonstrated by enhanced ocular neovascularization after cornea micropocket surgery in mice with hindlimb ischemia compared with that in non-ischemic control mice. In rabbits with hindlimb ischemia, circulating EPCs were further augmented after pretreatment with GM-*CSF*, with a corresponding improvement in hindlimb neovascularization. There was direct evidence that that contributed to enhanced corneal neovascularization were specifically mobilized from the bone marrow in response to ischemia and GM-*CSF* in mice transplanted with bone marrow from transgenic donors expressing beta-galactosidase transcriptionally regulated endothelial cell-specific Tie-2 promoter. These findings indicate...

10/3,K/3 (Item 3 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

07479061 93074501

[Focal seizures in nonketotic hyperglycemia]

Crises focais na hiperglicemia nao cetotica.

Guerreiro CA; Falcao AE; Silveira DC

Neurologia, Faculdade de Ciencias Medicas (FCM), Departamento de Universidade Estadual de Campinas (UNICAMP), Brasil.

Arquivos de neuro-psiquiatria (BRAZIL) Dec 1991, 49 (4) p447-9, ISSN 0004-282X Journal Code: 8WY

Languages: PORTUGUESE Summary Languages: ENGLISH Document type: JOURNAL ARTICLE ; English Abstract

The cases of three patients with focal seizure associated to non-cetotic hyperglycemia are reported. Two patients presented motor epilepsy partialis continua (*EPC*). One case showed *EPC* as the first clinical manifestation of diabetes mellitus. Neurological exam was normal in all patients. CT and *CSF* were normal in the cases they were evaluated. Scalp EEG registered during a focal seizure revealed a bilateral temporal spiky activity. Glycemia levels were 455...

10/3,K/4 (Item 4 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

07444796 91043403

CSF anomalies in children affected by Epilepsia Partialis Continua (

Gaggero R; Ferraris PC; De Negri M

Istituto G. Gaslini, Universita di Genova, Italy.

Neuropediatrics (GERMANY) Aug 1990, 21 (3) p143-5, ISSN 0174-304X Journal Code: NZA

Languages: ENGLISH

Document type: JOURNAL ARTICLE

CSF anomalies in children affected by Epilepsia Partialis Continua (*EPC*).

In two children affected with "Epilepsia Partialis Continua" (*EPC*) of progressive type, probably secondary to a slow encephalitis, the percentage of T-lymphocytes in *CSF* was lower than normal (30% compared to 90%). The *CSF* -T-lymphocytes are characterized by their ability to form E-rosettes. In one patient signs of intrathecal synthesis of IgG, especially oligoclonal bands at isoelectrofocusing, were observed. These results confirm, that in this type of *EPC* some immunological parameters in the *CSF* are impaired; so the aetiological hypothesis of an infectious disease, caused by a non-conventional viral agent, is supported.

(Item 1 from file: 5) 10/3,K/5 5:Biosis Previews(R) DIALOG(R)File (c) 2001 BIOSIS. All rts. reserv.

BIOSIS NO.: 200000517404 12763781

Angiogenesis and vasculogenesis. Therapeutic approaches for stimulation of post-natal necvascularization.

AUTHOR: Kalka Christoph(a); Asahara Takayuki; Krone Wilhelm; Isner Jeffrey

AUTHOR ADDRESS: (a) Cardiovascular Research, St. Elizabeth's Medical Center, 736 Cambridge Street, Boston, MA, 02135**USA

JOURNAL: Herz 25 (6):p611-622 September, 2000

MEDIUM: print ISSN: 0340-9937

DOCUMENT TYPE: Article RECORD TYPE: Abstract

LANGUAGE: German; Non-English SUMMARY LANGUAGE: English; German

... ABSTRACT: new blood vessels from in situ differentiating endothelial cells. Recently considered to be restricted to embryogenesis, there exists now striking evidence that endothelial progenitor cells (*EPC*) circulate also in adult peripheral blood able to participate in ongoing neovascularization. Different cytokines and growth factors have a stimulatory effect on these bone-marrow derived *EPC*. Granulocyte macrophage colony stimulating factor (GM-*CSF*) and vascular endothelial growth factor (VEGF) mobilize *EPC* from the bone marrow into the peripheral circulation. While their endogenous contribution to postnatal neovascularization needs to be documented, the iatrogenic expansion and mobilization of *EPC* might represent an effective means to augment the resident population of endothelial cells (ECs). This kind of cell therapy for tissue regeneration in ischemic cardiovascular...

(Item 2 from file: 5) 10/3,K/6 DIALOG(R)File 5:Biosis Previews(R) (c) 2001 BIOSIS. All rts. reserv.

BIOSIS NO.: 199900503516

Study on the mechanism of changes in N-linked sugar chain structure of erythroid progenitor cells surface in vitamin A deficiency rats.

AUTHOR: Feng Tao(a); Li Tingyu(a); Wang Yaping(a); Liu Yu(a); Qu Ping(a);

Jiang Rong(a)

AUTHOR ADDRESS: (a) Department of Biochemistry, College of Basic Medical Sciences, Chongqing Medical University, Chongqing, 400046**China

JOURNAL: Acta Nutrimenta Sinica 21 (1):p13-17 June, 1999

ISSN: 0512-7955

DOCUMENT TYPE: Article RECORD TYPE: Abstract

LANGUAGE: Chinese; Non-English SUMMARY LANGUAGE: Chinese; English

ABSTRACT: Objective: To clarify the mechanism of abnormality of N-linked sugar chain structure of erythroid progenitor cells (*EPC*) caused by vitamin A deficiency (VAD). Method: Effects of bone marrow stromal cell media (BMSCM) and spleen cell media (SCM) from VAD rats on the N-linked sugar chain structure of *EPC* surface in normal rats were investigated by 3H-Mannose (3H-Man) incorporation, serial lectin affinity chromatography and gelfiltration combined with exoglycosidase treatment. Results: The results showed that BMSCM and SCM from VAD rats: (1) decreased 3H-Man incorporation into N-glycopeptide on *EPC* surface; (2) decreased the percentage of complex type and increased the percentages of high mannose and hybrid type; (3) in complex type, declined the percentages...

...or B-Gn and C-Fuc. Conclusion: It is suggested that VAD can affect the expression/activity of hematopoietic growth factors, IL-3 and GM-*CSF*, and therefore lead to abnormality of N-sugar chains of *EPC* surface and proliferation of *EPC*.

(Item 3 from file: 5) 10/3,K/7 DIALOG(R)File 5:Biosis Previews(R) (c) 2001 BIOSIS. All rts. reserv.

BIOSIS NO.: 000088026878 06717452

EFFECTS OF LYMPHOKINES AND IMMUNE COMPLEXES ON MURINE PLACENTAL CELL GROWTH

AUTHOR: ARMSTRONG D T; CHAOUAT G

AUTHOR ADDRESS: DEP. OBSTET. GYNAECOL., 9-OF10, UNIV. HOSP. LONDON,

ONTARIO, CANADA N6A 5A5.

JOURNAL: BIOL REPROD 40 (3). 1989. 466-474. 1989

FULL JOURNAL NAME: Biology of Reproduction

CODEN: BIREB

RECORD TYPE: Abstract LANGUAGE: ENGLISH

- ... ABSTRACT: absence or presence of ConA-conditioned medium. In contrast to late-gestational stage placental cells, cell suspensions obtained from Days 8-9 murine ectoplacental cone (*EPC*) outgrowths, or from earlier stage placentas (Day 12-14) responded to low concentrations of conditioned medium from ConA-stimulated splenocytes with increased proliferation. The effect...
- ...impressive on placental cells at gestational ages later than 12 days than on earlier stage preparations. On all placental cell suspensions tested, as well as *EPC* cells, a clear-cut inhibition of growth was observed at high doses of conditioned medium. To rule out a direct role of ConA on placental...
- ... yielding similar data. Partially purified rat interleukin-2 (IL-2) did not stimulate placental growth in vitro, whereas purified granulocyte-macrophage colony-stimulating factor (GM-*CSF*) was active on both *EPC* and mature placental cells. The results of these experiments support an "immunotrophic" role of maternal lymphocytes in enhancing placental growth in allogeneically pregnant mice, but...
- ...probably are not mediated by direct effects on placental cells. They also confirm that one of the active T cell lymphokines is most probably GM-*CSF*, and suggest that the age or differentiation state of placenta is involved in the pattern of the response to immunotrophic stimuli.

(Item 1 from file: 73) 10/3,K/8

DIALOG(R) File 73: EMBASE

(c) 2001 Elsevier Science B.V. All rts. reserv.

EMBASE No: 1992006063 04865848

Partial seizures in non-cetotic hyperglycemia CRISES FOCAIS NA HIPERGLICEMIA NÃO CETÔTICA

Guerreiro C.A.M.; Falcao A.E.; Silveira D.C.

Departamento de Neurologia, Faculdade de Ciencias Medicas, Universidade Estadual de Campinas, Caixa Postal 6111, 13081 Campinas SP Brazil Arquivos de Neuro-Psiquiatria (ARQ. NEURO-PSIQUIATR.) (Brazil) 1991, 49/4 (447-449)

CODEN: ANPIA ISSN: 0004-282X DOCUMENT TYPE: Journal; Article

SUMMARY LANGUAGE: PORTUGUESE; ENGLISH LANGUAGE: PORTUGUESE

The cases of three patients with focal seizure associated to non-cetotic

hyperglycemia are reported. Two patients presented motor e epsy partialis continua (*EPC*). One case showed *EPC* as the first clinical manifestation of diabetes mellitus. Neurological exam was normal in all patients. CT and *CSF* were normal in the cases they were evaluated. Scalp EEG registered during a focal seizure revealed a bilateral temporal spiky activity. Glycemia levels were 455... ?ds

```
Description
       Items
Set
                (THERAPEUTIC (W) ANGIOGENESIS) OR (NEOVASCULARIZATION)
        25951
S1
                S1 AND (GM-CSF OR M-CSF OR G-CSF)
           0
s2
               S1 AND (SCF OR SDF-1 OR ANGIOPOIETIN-? OR FLT-3)
           86
s3
                S3 AND (IN (W) VIVO)
           10
S4
               RD (unique items)
           9
S5
                S1 AND ((IN (W) VIVO) AND B-FGF)
            0
S6
               (THERAPEUTIC (W) ANGIOGENESIS) AND (B-FGF)
           n
s7
               (GM-CSF) AND ((EPC) OR (ENDOTHELIAL (W) PROGENITOR?))
           0
S8
               (CSF) AND (EPC)
           13
S9
               RD (unique items)
           8
S10
?s (angiogenic (w) (peptide or polypeptide)) and (EPC)
           13078 ANGIOGENIC
          561839 PEPTIDE
          180009 POLYPEPTIDE
             193 ANGIOGENIC(W) (PEPTIDE OR POLYPEPTIDE)
            1898 EPC
               0 (ANGIOGENIC (W) (PEPTIDE OR POLYPEPTIDE)) AND (EPC)
?s (therapeutic (w) angiogenesis) and (endothelial (w) progenitor (w) cell?)
Processing
         1605538 THERAPEUTIC
           34478 ANGIOGENESIS
             434 THERAPEUTIC (W) ANGIOGENESIS
          232351 ENDOTHELIAL
           50136 PROGENITOR
         6903151 CELL?
             107 ENDOTHELIAL (W) PROGENITOR (W) CELL?
                  (THERAPEUTIC (W) ANGIOGENESIS) AND (ENDOTHELIAL (W)
     S12
                  PROGENITOR (W) CELL?)
?rd
 ...completed examining records
           6 RD (unique items)
     S13
 ?t s13/3, k/all
              (Item 1 from file: 155)
 DIALOG(R) File 155: MEDLINE(R)
 (c) format only 2000 Dialog Corporation. All rts. reserv.
           21103748
 10831398
  *Therapeutic* *angiogenesis* for ischemic cardiovascular disease.
   Freedman S; Isner JM
```

Divisions of Cardiology and Vascular Medicine, Tufts University School of Medicine, Boston, MA, USA

Journal of molecular and cellular cardiology (England) Mar 2001, 33 (3) p379-93, ISSN 0022-2828 Journal Code: J72

Languages: ENGLISH

Document type: Journal Article

Therapeutic *angiogenesis* for ischemic cardiovascular disease.

... activity, the best studied both in animal models and clinical trials are vascular endothelial growth factor (VEGF) and fibroblast growth factor (FGF). Clinical trials of *therapeutic* *angiogenesis* in patients with end-stage coronary artery disease have shown large increases in exercise time and marked reductions in symptoms of angina, as well as...

... clinical studies will be required to determine the optimal dose, formulation, route of administration and combinations of growth factors, as well as the requirement for *endothelial* *progenitor* *cell* or stem cell supplementation, to provide effective and safe thera tic myocardial angiogenesis. Copyright 2001 Academic Press.

(Item 2 from file: 155) 13/3,K/2

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

10659680 20526948

[Angiogenesis and vasculogenesis. Therapeutic strategies for stimulation of postnatal neovascularization]

Angiogenese und Vaskulogenese. Therapeutische Strategien zur Stimulation der postnatalen Neovaskularisation.

Kalka C; Asahara T; Krone W; Isner JM

Department of Medicine (Cardiovascular Research), Tufts University School of Medicine, St. Elizabeth's Medical Center, Boston, Massachusetts, USA. Ckalka@juno.com

Sep 2000, 25 (6) p611-22, ISSN 0340-9937 Herz (GERMANY)

Journal Code: F88

Languages: GERMAN

Document type: Journal Article; Review; Review, Tutorial

...and adult organism. While pathologic angiogenesis includes the role of post-natal neovascularization in the pathogenesis of arthritis, diabetic retinopathy, and tumor growth and metastasis, *therapeutic* *angiogenesis*, either endogenously or in response to administered growth factors, includes the development of collateral blood vessels in tissue ischemia. Preclinical studies established that angiogenic growth...

... the development of new blood vessels from in situ differentiating endothelial cells. Recently considered to be restricted to embryogenesis, there exists now striking evidence that *endothelial* *progenitor* *cells* (EPC) circulate also in adult peripheral blood able to participate in ongoing neovascularization. Different cytokines and growth factors have a stimulatory effect on these bone...

(Item 3 from file: 155) 13/3,K/3

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2000 Dialog Corporation. All rts. reserv.

99301984 09986916

Vascular endothelial factor (VEGF): *therapeutic* *angiogenesis* and vasculogenesis in the treatment of cardiovascular disease]

Therapeutische (VEGF): endothelialer Wachstumsfaktor Vaskularer Behandlung kardiovaskularer Angiogenese und Vaskulogenese der in Erkrankungen.

Kalka C; Takahashi T; Masuda H; Asahara T; Isner JM

Department of Vascular Medicine, St. Elizabeth's Medical Center, Tufts University School of Medicine, Boston, MA, USA.

Apr 15 1999, 94 (4) p193-201, ISSN Medizinische Klinik (GERMANY) Journal Code: M9K 0723-5003

Summary Languages: ENGLISH Languages: GERMAN

Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL; English Abstract

Vascular endothelial factor (VEGF): *therapeutic* *angiogenesis* and vasculogenesis in the treatment of cardiovascular disease]

... development of new blood vessels from in situ differentiating been previously considered restricted to has cells, endothelial embryogenesis. Recent investigations, however, show the existence of *endothelial* *progenitor* *cells* (EPCs) in the peripheral blood of the adult and their participation in ongoing neovascularization. Molecular and cell-biological experiments suggest that different cytokines and growth...

eviews(R) 5:Biosis P DIALOG(R)File (c) 2001 BIOSIS. All rts. reserv.

BIOSIS NO.: 200100161074 12953925

Therapeutic *angiogenesis* by bone marrow-derived cell transplantation in pigs with coronary constrictor-induced chronic myocardial ischemia. AUTHOR: Ueno Takafumi(a); Coussement Patrick K; Murohara Toyoaki; Cui Jianhua; Fallahi Payam; Ueno Mika; Frohwein Stephen; Baldwin Samuel;

Palasis Maria: Imaizumi Tsutomu; Chronos Nicolas A F; Robinson Keith A AUTHOR ADDRESS: (a) Atlanta Cardiovascular Research Institute, Norcross, GA

**USA JOURNAL: Journal of the American College of Cardiology 37 (2 Supplement A):p48A February, 2001

MEDIUM: print

CONFERENCE/MEETING: 50th Annual Scientific Session of the American College of Cardiology Orlando, Florida, USA March 18-21, 2001

ISSN: 0735-1097

RECORD TYPE: Citation

LANGUAGE: English

SUMMARY LANGUAGE: English

Therapeutic *angiogenesis* by bone marrow-derived cell transplantation in pigs with coronary constrictor-induced chronic myocardial ischemia.

DESCRIPTORS:

...ORGANISMS: PARTS ETC: *endothelial* *progenitor* *cells*; *therapeutic* *angiogenesis*; MISCELLANEOUS TERMS:

(Item 2 from file: 5) 13/3,K/5 DIALOG(R)File 5:Biosis Previews(R) (c) 2001 BIOSIS. All rts. reserv.

BIOSIS NO.: 200000517404

Angiogenesis and vasculogenesis. Therapeutic approaches for stimulation of post-natal neovascularization.

AUTHOR: Kalka Christoph(a); Asahara Takayuki; Krone Wilhelm; Isner Jeffrey

AUTHOR ADDRESS: (a) Cardiovascular Research, St. Elizabeth's Medical Center, 736 Cambridge Street, Boston, MA, 02135**USA

JOURNAL: Herz 25 (6):p611-622 September, 2000

MEDIUM: print ISSN: 0340-9937

DOCUMENT TYPE: Article RECORD TYPE: Abstract

LANGUAGE: German; Non-English SUMMARY LANGUAGE: English; German

... ABSTRACT: and adult organism. While pathologic angiogenesis includes the role of post-natal neovascularization in the pathogenesis of arthritis, diabetic retinopathy, and tumor growth and metastasis, *therapeutic* *angiogenesis*, either endogenously or in response to administered growth factors, includes the development of collateral blood vessels in tissue ischemia. Preclinical studies established that angiogenic growth...

... the development of new blood vessels from in situ differentiating endothelial cells. Recently considered to be restricted to embryogenesis, there exists now striking evidence that *endothelial* *progenitor* *cells* (EPC) circulate also in adult peripheral blood able to participate in ongoing neovascularization. Different cytokines and growth factors have a stimulatory effect on these bone...

(Item 1 from file: 73) 13/3,K/6 DIALOG(R)File 73:EMBASE

(c) 2001 Elsevier Science B.V. All rts. reserv.

EMBASE No: 1999161673 07678437

Vascular endothelial growen factor (VEGF): *Therapeutic* giogenesis* and vasculogenesis in the treatment of cardiovascular disease VASKULARER ENDOTHELIALER WACHSTUMSFAKTOR (VEGF): THERAPEUTISCHE ANGIOGENESE UND VASKULOGENESE IN DER BEHANDLUNG KARDIOVASKULARER ERKRANKUNGEN

Kalka C.; Takahashi T.; Masuda H.; Asahara T.; Isner J.M. Dr. C. Kalka, Department of Vascular Medicine, St. Elizabeth's Medical Center, Tufts University School of Medicine, 736 Cambridge Street, Boston, MA 02135 United States Medizinische Klinik (MED. KLIN.) (Germany) 15 APR 1999, 94/4 (193-201) ISSN: 0723-5003 CODEN: MEKLA DOCUMENT TYPE: Journal; Review SUMMARY LANGUAGE: ENGLISH; GERMAN LANGUAGE: GERMAN

NUMBER OF REFERENCES: 89

10570996

20332856

Cuevas P; Asin-Cardiel E

Vascular endothelial growth factor (VEGF): *Therapeutic* *angiogenesis* and vasculogenesis in the treatment of cardiovascular disease

...development of new blood vessels from in situ differentiating endothelial cells, has been previously considered restricted to embryogenesis. Recent investigations, however, show the existence of *endothelial* *progenitor* *cells* (EPCs) in the peripheral blood of the adult and their participation in ongoing neovascularization. Molecular and cell-biological experiments suggest that different cytokines and growth... ?ds

```
Description
        Items
Set
                (THERAPEUTIC (W) ANGIOGENESIS) OR (NEOVASCULARIZATION)
        25951
S1
                S1 AND (GM-CSF OR M-CSF OR G-CSF)
            0
S2
                S1 AND (SCF OR SDF-1 OR ANGIOPOIETIN-? OR FLT-3)
           86
s3
                S3 AND (IN (W) VIVO)
           10
S4
            9
                RD (unique items)
S5
                S1 AND ((IN (W) VIVO) AND B-FGF)
            0
S6
                (THERAPEUTIC (W) ANGIOGENESIS) AND (B-FGF)
            0
s7
                (GM-CSF) AND ((EPC) OR (ENDOTHELIAL (W) PROGENITOR?))
S8
            0
                (CSF) AND (EPC)
           13
S9
                RD (unique items)
            8
S10
                (ANGIOGENIC (W) (PEPTIDE OR POLYPEPTIDE)) AND (EPC)
            0
S11
                (THERAPEUTIC (W) ANGIOGENESIS) AND (ENDOTHELIAL (W) PROGEN-
S12
             ITOR (W) CELL?)
                RD (unique items)
            6
S13
?s (therapeutic (w) angiogenesis)
         1605538 THERAPEUTIC
           34478 ANGIOGENESIS
                  (THERAPEUTIC (W) ANGIOGENESIS)
              434
     S14
?s s14 and (ischemia)
              434 S14
                  ISCHEMIA
           271117
              267 S14 AND (ISCHEMIA)
     S15
?s s15 and (brain)
              267 S15
          1318088 BRAIN
               2 S15 AND (BRAIN)
     S16
 ?rd
 ...completed examining records
                2 RD (unique items)
      S17
 ?t s17/3, k/all
               (Item 1 from file: 155)
  17/3,K/1
 DIALOG(R) File 155: MEDLINE(R)
 (c) format only 2000 Dialog Corporation. All rts. reserv.
```

Electromagnetic *therapeutic* *angiogenesis*: the next step.

Departamento de Investigacion, Hospital Ramon y Cajal, Madrid, Spain.

pedro.cuevas@hrc.es p349-50. 2000. 22 research (ENGLAND) Jun Neurological

Journal Code: NY9 0161-6412

Languages: ENGLISH

Document type: JOURNAL ARTICLE; REVIEW; REVIEW, TUTORIAL

Electromagnetic *therapeutic* *angiogenesis*: the next step.

Therapeutic *angiogenesis*, in the form of growth factor protein administration or gene therapy, is a new method of treatment for patients with severe coronary and peripheral artery...

Descriptors: *Brain* *Ischemia*--Therapy--TH; *Cerebral Revascularization Revascularization--Trends--TD; *Cerebral Stimulation Therapy--Trends--TD; *Neovascularization, Physiologic

(Item 1 from file: 73) 17/3,K/2

DIALOG(R)File 73:EMBASE

(c) 2001 Elsevier Science B.V. All rts. reserv.

EMBASE No: 1994260327

Angiogenesis: Potential therapy for ischaemic disease

Symes J.F.; Sniderman A.D.

Division of Cardiothoracic Surgery, Department of Surgery, St Elizabeth's Medical Center, 736 Cambridge Street, Boston, MA 02135 United States Current Opinion in Lipidology (CURR. OPIN. LIPIDOLOGY) (United Kingdom) 1994, 5/4 (305-312)

ISSN: 0957-9672 CODEN: COPLE DOCUMENT TYPE: Journal; Review

SUMMARY LANGUAGE: ENGLISH LANGUAGE: ENGLISH

...various exogenous angiogenic agents by several routes has resulted in enhanced growth of collateral vessels in animal models of myocardial, peripheral arterial, and cerebral insufficiency. *Therapeutic* *angiogenesis* may have an immense clinical potential.

MEDICAL DESCRIPTORS: *angiogenesis; **ischemia*--drug therapy--dt

animal cell; animal experiment; animal model; *brain* *ischemia*--drug therapy--dt; collateral circulation; controlled study; heart muscle *ischemia*--drug therapy--dt; intraarticular drug administration; intramuscular drug administration; leg *ischemia*--drug therapy--dt; leg revascularization; necrosis; nonhuman; priority journal; rat; review; subcutaneous drug administration; topical drug administration ?ds

```
Description
Set
        Items
                (THERAPEUTIC (W) ANGIOGENESIS) OR (NEOVASCULARIZATION)
        25951
S1
                S1 AND (GM-CSF OR M-CSF OR G-CSF)
S2
                S1 AND (SCF OR SDF-1 OR ANGIOPOIETIN-? OR FLT-3)
           86
S3
                S3 AND (IN (W) VIVO)
           10
S4
                RD (unique items)
            9
S5
                S1 AND ((IN (W) VIVO) AND B-FGF)
            0
S6
                (THERAPEUTIC (W) ANGIOGENESIS) AND (B-FGF)
            0
s7
                (GM-CSF) AND ((EPC) OR (ENDOTHELIAL (W) PROGENITOR?))
            0
S8
                (CSF) AND (EPC)
S9
           13
                RD (unique items)
            8
S10
                (ANGIOGENIC (W) (PEPTIDE OR POLYPEPTIDE)) AND (EPC)
            0
                (THERAPEUTIC (W) ANGIOGENESIS) AND (ENDOTHELIAL (W) PROGEN-
S11
S12
             ITOR (W) CELL?)
                RD (unique items)
            6
S13
                (THERAPEUTIC (W) ANGIOGENESIS)
          434
S14
                S14 AND (ISCHEMIA)
          267
S15
                S15 AND (BRAIN)
S16
            2
                RD (unique items)
            2
?s s15 and (CNS)
                  S15
             267
          108636 CNS
```

```
0 S15 AND
    S18
?s s15 and (limb or heart)
            267 S15
         129572 LIMB
         1471140 HEART
            187 S15 AND (LIMB OR HEART)
?rd
                        (50)
...examined 50 records
...examined 50 records
                        (100)
...examined 50 records (150)
...completed examining records
            116 RD (unique items)
     S20
?s s20 not py>1999
             116 S20
                 PY>1999
         1629129
              60 S20 NOT PY>1999
     S21
?s s21 and (co-administration or co-delivery)
              60 S21
              46 CO-ADMINISTRATION
               2 CO-DELIVERY
                 S21 AND (CO-ADMINISTRATION OR CO-DELIVERY)
     S22
?s s21 and (endothelial (w) cell (w) mitogen)
              60 S21
          232351 ENDOTHELIAL
         5352207 CELL
           91415 MITOGEN
             344 ENDOTHELIAL (W) CELL (W) MITOGEN
               2 S21 AND (ENDOTHELIAL (W) CELL (W) MITOGEN)
     S23
?t s23/3, k/all
               (Item 1 from file: 155)
 23/3,K/1
DIALOG(R) File 155:MEDLINE(R)
(c) format only 2000 Dialog Corporation. All rts. reserv.
09447397
           98196682
 Constitutive expression of phVEGF165 after intramuscular gene transfer
promotes collateral vessel development in patients with critical *limb*
 *ischemia* [see comments]
  Baumgartner I; Pieczek A; Manor O; Blair R; Kearney M; Walsh K; Isner JM
  Department of Medicine (Cardiology), St Elizabeth's Medical Center, Tufts
University School of Medicine, Boston, Mass 02135, USA.
                                  Mar 31 1998, 97 (12) p1114-23, ISSN
                        STATES)
   Circulation (UNITED
            Journal Code: DAW
   Contract/Grant No.: HL-02824, HL, NHLBI; HL-53354, HL, NHLBI; HL-57516,
 HL, NHLBI; +
                                               31;97(12):1108-10;
                                                                     Comment
               in Circulation 1998
                                       Mar
   Comment
 in: Circulation 1999 Jun 8;99(22):2967-8
   Languages: ENGLISH
   Document type: JOURNAL ARTICLE
```

Constitutive expression of phVEGF165 after intramuscular gene transfer promotes collateral vessel development in patients with critical *limb* *ischemia* [see comments]

BACKGROUND: Preclinical studies have indicated that angiogenic growth factors can stimulate the development of collateral arteries, a concept called "*therapeutic* *angiogenesis*." The objectives of this phase 1 clinical trial were (1) to document the safety and feasibility of intramuscular gene transfer by use of naked plasmid DNA encoding an *endothelial* *cell* *mitogen* and (2) to analyze potential therapeutic benefits in patients with critical *limb* *ischemia*. METHODS AND RESULTS: Gene transfer was performed in 10 limbs of 9 patients with nonhealing ischemic ulcers (n=7/10) and/or rest pain (n...

 \dots naked plasmid DNA encoding the 165-amino-acid isoform of human vascular endothelial growth factor (phVEGF165) was injected directly into the muscles of the ischemic *limb*. Gene expression was documented by a

transient increase in serum levels of VEGF monitored by ELISA. The ankle-brachial index improved significantly (0.33+/-0...

... resonance angiography showed qualitative evidence of improved distal flow in 8 limbs. Ischemic ulcers healed or markedly improved in 4 of 7 limbs, including successful *limb* salvage in 3 patients recommended for below-knee amputation. Tissue specimens obtained from an amputee 10 weeks after gene therapy showed foci of proliferating endothelial...

... permeability. CONCLUSIONS: These findings may be cautiously interpreted to indicate that intramuscular injection of naked plasmid DNA achieves constitutive overexpression of VEGF sufficient to induce *therapeutic* *angiogenesis* in selected patients with critical *limb* *ischemia*.

Descriptors: Collateral Circulation--Genetics--GE; *Endothelial Growth **Ischemia*--Therapy--TH; Transfer; Factors--Genetics--GE; *Gene *Lymphokines--Genetics--GE; *Plasmids

(Item 1 from file: 73) 23/3,K/2

DIALOG(R)File 73:EMBASE

(c) 2001 Elsevier Science B.V. All rts. reserv.

EMBASE No: 1998110133 07224358

Constitutive expression of phVEGFinf linf 6\$D5 after intramuscular gene transfer promotes collateral vessel development in patients with critical *limb* *ischemia*

Baumgartner I.; Pieczek A.; Manor O.; Blair R.; Kearney M.; Walsh K.; Isner J.M.

Dr. J.M. Isner, St Elizabeth's Medical Center, 736 Cambridge St, Boston,

MA 02135 United States

AUTHOR EMAIL: jisner@opal.tufts.edu

Circulation (CIRCULATION) (United States) 31 MAR 1998, 97/12

(1114-1123)

ISSN: 0009-7322 CODEN: CIRCA DOCUMENT TYPE: Journal; Article

SUMMARY LANGUAGE: ENGLISH LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 59

Constitutive expression of phVEGFinf linf 6\$D5 after intramuscular gene transfer promotes collateral vessel development in patients with critical *limb* *ischemia*

Background - Preclinical studies have indicated that angiogenic growth factors can stimulate the development of collateral arteries, a concept called '*therapeutic* *angiogenesis*.' The objectives of this phase 1 clinical trial were (1) to document the safety and feasibility of intramuscular gene transfer by use of naked plasmid DNA encoding an *endothelial* *cell* *mitogen* and (2) to analyze potential therapeutic benefits in patients with critical *limb* *ischemia*. Methods and Results -Gene transfer was performed in 10 limbs of 9 patients with nonhealing ischemic ulcers (n=7/10) and/or rest pain (n...

...encoding the 165-amino-acid isoform of human vascular endothelial growth factor (phVEGFinf linf 6\$D5) was injected directly into the muscles of the ischemic *limb*. Gene expression was documented by a transient increase in serum levels of VEGF monitored by ELISA. The ankle-brachial index improved significantly (0.33+/-0...

...resonance angiography showed qualitative evidence of improved distal flow in 8 limbs. Ischemic ulcers healed or markedly improved in 4 of 7 limbs, including successful *limb* salvage in 3 patients recommended for below- knee amputation. Tissue specimens obtained from an amputee 10 weeks after gene therapy showed foci of proliferating endothelial...

...permeability. Conclusions - These findings may be cautiously interpreted to indicate that intramuscular injection of naked plasmid DNA achieves